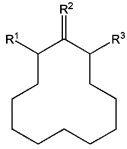
Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application. Please amend the claims as follows:

Listing of Claims:

1. (Currently amended) A method of ~~inhibiting~~ suppressing a Janus tyrosine kinase 3 (Jak3)-dependent function ~~and/or proliferation~~ of a cell expressing Janus tyrosine kinase 3, comprising:

selectively targeting Jak3 activity in the cell for inhibition by contacting the cell with at least one compound of the formula (I)



wherein

R^1 is H, $=CH_2$, $CH_2N(CH_3)_2$, $CH_2SC(O)CH_3$, $CH_2SC_6H_5$, CH_2SCH_2-(4-$C_6H_4OCH_3$), $CH_2SC(O)C_6H_5$ or $CH_2N(CH_2CH_3)_2$;

R^2 is O;

R^3 is $CH_2N(CH_3)_2$, $CH_2N(CH_2CH_3)_2$ or CH_2-(N-morphyl);

or a salt thereof, at a concentration effective to selectively inhibit Janus tyrosine kinase 3 activity, whereby a Jak3-dependent function of said cell is suppressed ~~and/or proliferation of said cell is inhibited~~.

2. (Original) The method of claim 1 wherein R^1 is $CH_2N(CH_3)_2$ and R^3 is $CH_2N(CH_3)_2$.

3. (Original) The method of claim 2 wherein said compound is the meso stereoisomer.

4. (Original) The method of claim 1 wherein the cell is of lymphoid or myeloid origin.

5. (Currently amended) The method of claim 1 comprising interfering with the signal 3 pathway in said cell by selectively inhibiting Jak3 activity, such that cell division is blocked.

6. (Currently amended) The method of claim 1 wherein, at said concentration effective to selectively inhibit said Janus tyrosine kinase 3, said at least one compound is ~~substantially~~ non-inhibitory or is less inhibitory of protein tyrosine kinase activity other than Janus tyrosine kinase 3 activity.

7. (Currently amended) The method of claim 1 wherein said cell is a T-cell expressing Jak3 and Janus tyrosine kinase 2 (Jak2), and the method comprises inhibiting Jak3 activity at least 3 fold more than inhibiting Jak2 activity in said T-cells.

8. (Original) The method of claim 1 comprising choosing at least one said compound which is less capable of inhibiting Jak2 and Stat5a/b activation by prolactin (PRL) at a concentration sufficient to inhibit Jak3 and Stat5a/b activated by IL2.

9. (Canceled)

10. (Currently amended) An *in vivo* method of suppressing an undesired Jak3-dependent function of a cell expressing Janus tyrosine kinase 3 in a mammalian subject in need thereof comprising:

selectively inhibiting Jak3 activity in the cell by contacting said cell with at least one compound as defined in claim 1~~, or a metabolite or derivative thereof,~~ in an amount effective to interfere with the signal 3 pathway in the cell and thereby ~~inhibit~~ suppress said undesired Jak3-dependent cell function,

said contacting comprising administering to said subject a therapeutically effective amount of a pharmaceutical composition containing at least one said compound, as defined in claim 1, or pharmaceutically acceptable salt thereof, ~~or a metabolite of said compound, or a precursor of said compound capable of being converted in the body of the subject to said compound,~~ in a pharmaceutically acceptable carrier, to ~~inhibit~~ suppress an undesired Jak3-dependent cell function.

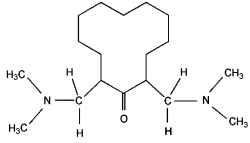
11. (Original) The method of claim 10 wherein said cell is a T-cell and said amount of said pharmaceutical composition is effective to block cell division in said T-cell.

12. (Currently amended) The method of claim 10 comprising continuously ~~or periodically~~ administering said pharmaceutical composition to the subject.

13-30. (Canceled)

31. (Currently amended) A method of ~~inhibiting~~ suppressing an undesired Janus tyrosine kinase 3-dependent function of a cell ~~and/or proliferation of a cell~~ expressing Janus tyrosine kinase 3, comprising:

selectively targeting Janus tyrosine kinase 3 activity in the cell for inhibition by contacting the cell with ~~at least one~~ a compound of the formula



or a salt thereof, at a concentration effective to selectively inhibit the activity of said Janus tyrosine kinase 3, to suppress an undesired Janus tyrosine kinase 3-dependent function of said cell.

32-33. (Canceled)

34. (New) The method of claim 1 wherein suppressing at least one Jak3-dependent function of said cell reduces proliferation of said cell.

35. (New) The method of claim 10 comprising periodically administering said pharmaceutical composition to the subject.

36. (New) The method of claim 36 wherein said cell of immune origin is selected from the group consisting of T-cells, B-cells, natural killer (NK) cells and monocytes.

37. (New) The method of claim 11 wherein said undesired function comprises a T-cell mediated immune response, and wherein blocking cell division in a plurality of said T-cells provides T-cell mediated immunosuppression in said subject.

38. (New) The method of claim 10 wherein suppression of said undesired Jak3-dependent cell function comprises interfering with the signal 3 pathway in the cell.

39. (New) The method of claim 31 wherein suppressing at least one Jak3-dependent function of said cell reduces proliferation of said cell.

40. (New) The method of claim 1 wherein R^1 is H.

41. (New) The method of claim 1 wherein R^1 is $=CH_2$.

42. (New) The method of claim 1 wherein R^1 is $CH_2N(CH_3)_2$.

43. (New) The method of claim 1 wherein R^1 is $CH_2SC(O)CH_3$.

44. (New) The method of claim 1 wherein R^1 is $CH_2SC_6H_5$.

45. (New) The method of claim 1 wherein R^1 is CH_2SCH_2-(4-$C_6H_4OCH_3$).

46. (New) The method of claim 1 wherein R^1 is $CH_2SC(O)C_6H_5$.

47. (New) The method of claim 1 wherein R^1 is $CH_2N(CH_2CH_3)_2$.

48. (New) The method of claim 1 wherein R^3 is $CH_2N(CH_3)_2$.

49. (New) The method of claim 1 wherein R^3 is $CH_2N(CH_2CH_3)_2$.

50. (New) The method of claim 1 wherein R^3 is CH_2-(N-morphyl).